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JUL 1 5 2002

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|                      |                   |
|----------------------|-------------------|
| Application Number   | 09/907,009        |
| Confirmation Number  | 8057              |
| Filing Date          | July 16, 2001     |
| First Named Inventor | Kenneth H. Abbott |
| Group Art Unit       | 2173              |
| Examiner Name        |                   |

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of

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Attorney Docket No.

294438008US4

**U.S. PATENT DOCUMENTS**

| *EXAMINER<br>INITIALS* | Cite<br>No. | U.S. Patent Document |                         | Name of Patentee or Applicant<br>of Cited Document | Date of Publication of Cited<br>Document | Pages, Columns, Lines,<br>Where Relevant Passages or<br>Relevant Figures Appear |
|------------------------|-------------|----------------------|-------------------------|--|--|---|
|                        |             | NUMBER               | Kind Code<br>(if known) |  |  |   |
| TH                     | AA          | 4,916,441            |                         | Gombrich   | 4/10/90                                  |   |
|                        | AB          | 5,032,083            |                         | Friedman   | 7/16/91                                  |   |
|                        | AC          | 5,201,034            |                         | Matsuura et al.                                    | 4/6/93                                   |   |
|                        | AD          | 5,208,449            |                         | Eastman et al.                                     | 5/4/93                                   | RECEIVED  |
|                        | AE          | 5,214,757            |                         | Mauney et al.                                      | 5/25/93                                  | JUL 1 8 2002  |
|                        | AF          | 5,227,614            |                         | Danielson et al.                                   | 7/13/93                                  | Technology Center 2100  |
|                        | AG          | 5,335,276            |                         | Thompson et al.                                    | 8/2/94                                   |   |
|                        | AH          | 5,416,730            |                         | Lookofsky  | 5/16/95                                  |   |
|                        | AI          | 5,470,233            |                         | Fruchterman et al.                                 | 11/28/95                                 |   |
|                        | AJ          | 5,493,692            |                         | Theimer et al.                                     | 2/20/96                                  |   |
|                        | AK          | 5,506,580            |                         | Whiting et al.                                     | 4/9/96                                   |   |
|                        | AL          | 5,555,376            |                         | Theimer et al.                                     | 9/10/96                                  |   |
|                        | AM          | 5,559,520            |                         | Barzegar et al.                                    | 9/24/96                                  |   |
|                        | AN          | 5,568,645            |                         | Morris et al.                                      | 10/22/96                                 |   |
|                        | AO          | 5,611,050            |                         | Theimer et al.                                     | 3/11/97                                  |   |
|                        | AP          | 5,642,303            |                         | Small et al.                                       | 6/24/97                                  |   |
|                        | AQ          | 5,646,629            |                         | Loomis et al.                                      | 7/8/97                                   |   |
|                        | AR          | 5,719,744            |                         | Jenkins et al.                                     | 2/17/98                                  |   |
|                        | AS          | 5,726,660            |                         | Purdy et al.                                       | 3/10/98                                  |   |
|                        | AT          | 5,781,913            |                         | Felsenstein et al.                                 | 7/14/98                                  |   |
|                        | AU          | 5,790,974            |                         | Tognazzini   | 8/4/98                                   |   |
|                        | AV          | 5,798,733            |                         | Ethridge   | 8/25/98                                  |   |
|                        | AW          | 5,812,865            |                         | Theimer et al.                                     | 9/22/98                                  |   |
|                        | AX          | 5,873,070            |                         | Bunte et al.                                       | 2/16/99                                  |   |
|                        | AY          | 5,878,274            |                         | Kono et al.  | 3/2/99                                   |   |
|                        | AZ          | 5,902,347            |                         | Backman et al.                                     | 5/11/99                                  |   |
|                        | BA          | 5,910,799            |                         | Carpenter et al.                                   | 6/8/99                                   |   |
|                        | BB          | 5,938,721            |                         | Dussell et al.                                     | 8/17/99                                  |   |
|                        | BC          | 5,948,041            |                         | Abo et al.   | 9/7/99                                   |   |

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| Attorney Docket No.  | 294438008US4      |

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| Sheet | 2  | of        | 4 |                    |          |
|-------|----|-----------|---|--------------------|----------|
| TH    | BD | 5,959,611 |   | Smailagic et al.   | 9/28/99  |
|       | BE | 5,983,335 |   | Dwyer III          | 11/9/99  |
|       | BF | 5,991,687 |   | Hale et al.        | 11/23/99 |
|       | BG | 6,047,301 |   | Bjorklund et al.   | 4/4/00   |
|       | BH | 6,064,943 |   | Clark, Jr., et al. | 5/16/00  |
|       | BI | 6,108,197 |   | Janik              | 8/22/00  |
|       | BJ | 6,294,953 |   | Steeves            | 9/25/01  |

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**FOREIGN PATENT DOCUMENTS**

| *EXAMINER<br>INITIALS | Cite<br>No. | Foreign Patent Document |               |                         | Name of Patentee or Applicant<br>of Cited Document | Date of Publication of<br>Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear | T |
|-----------------------|-------------|-------------------------|---------------|-------------------------|--|--|---|---|
|                       |             | Office                  | Number        | Kind Code<br>(if known) |  |  |   |   |
| TH                    | BK          | PCT                     | WO 90/08361   |                         | The Scott Fetzer Company                           | 7/26/90                                  |   |   |
|                       | BL          | PCT                     | WO 97/03434   |                         | Virtual I/O, Inc.                                  | 1/30/97                                  |   |   |
|                       | BM          | EPO                     | EP 0823 813A2 |                         | Kopin Corporation                                  | 2/11/98                                  |   |   |
|                       | BN          | JPO                     | 05260188      |                         | Matsushita Electric Ind. Co. Ltd.                  | 10/8/93                                  |   |   |
|                       | BO          | JPO                     | 09091112      |                         | Toshiba Corp.                                      | 4/4/97                                   |   |   |

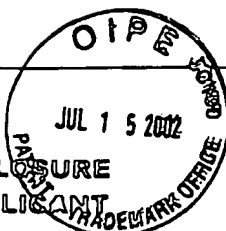
**OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS**

| *EXAMINER<br>INITIALS | Cite<br>No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume/issue number(s), publisher, city and/or country where published. | T |
|-----------------------|-------------|---|---|
| TH                    | BP          | "Affective Understanding: Modeling and Responding to User Affect,"<br><a href="http://www.media.mit.edu/affec/AC_research/understanding.html">http://www.media.mit.edu/affec/AC_research/understanding.html</a><br>[Accessed 10/2/98]                           |   |
|                       | BQ          | "Alps GlidePoint," <a href="http://www.alps.com/p.17.html">http://www.alps.com/p.17.html</a><br>[Accessed 10/2/98]  |   |
|                       | BR          | Aoki, Hisashi et al., "Realtime Personal Positioning System for a Wearable Computer," 3 <sup>rd</sup> International Symposium on Wearable Computers, San Francisco, California, October 18-19, 1999   |   |
|                       | BS          | Billinghurst, Mark and Thad Starner, "New Ways to Manage Information," IEEE, pp. 57-64, January 1999.   |   |
|                       | BT          | Bowskill, J. et al., "Wearable Location Mediated Telecommunications; A First Step Towards Contextual Communication," 3 <sup>rd</sup> International Symposium on Wearable Computers, San Francisco, California, October 18-19 1999                               |   |
|                       | BU          | Dey, Anind K. et al., "The Conference Assistant: Combining Context-Awareness with Wearable Computing," 3 <sup>rd</sup> International Symposium on Wearable Computers, San Francisco, California, October 18-19, 1999  |   |
|                       | BV          | Golding, Andrew and Neal Lesh, "Indoor Navigation Using a Diverse Set of Cheap, Wearable Sensors," 3 <sup>rd</sup> International Symposium on Wearable Computers, San Francisco, California, October 18-19, 1999  |   |

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|-------|----|--|---|---------------------|--------------|------------------------|
| Sheet | 3  | of   | 4 | Attorney Docket No. | 294438008US4 | <b>RECEIVED</b>        |
| TH    | BW | "GyroPoint Technology,"<br><a href="http://www.gyration.com/html/gyropoint.html">http://www.gyration.com/html/gyropoint.html</a><br>[Accessed 10/2/98]   |   |                     |              | JUL 18 2002            |
|       | BX | "Haptics,"<br><a href="http://www.ai.mit.edu/projects/handarm-haptics/haptics.html">http://www.ai.mit.edu/projects/handarm-haptics/haptics.html</a><br>[Accessed 10/2/98]  |   |                     |              | Technology Center 2100 |
|       | BY | Hull et al., "Towards Situated Computing," Hewlett-Packard Laboratories, HPL-97-66 (1997).   |   |                     |              |                        |
|       | BZ | Kirsch, Dana, "The Sentic Mouse: A Tool for Measuring Emotional Valence,"<br><a href="http://www.media.mit.edu/affect/AC_research/projects/sentic_mouse.html">http://www.media.mit.edu/affect/AC_research/projects/sentic_mouse.html</a><br>[Accessed 10/2/98] |   |                     |              |                        |
|       | CA | Kortuem, Gerd "When Cyborgs Meet: Building Communities of Cooperating Wearable Agents," 3 <sup>rd</sup> International Symposium on Wearable Computers, San Francisco, California, October 18-19, 1999  |   |                     |              |                        |
|       | CB | Lashkari, Yezdi et al., "Collaborative Interface Agents," Proceedings of AAAI '94 Conference, Seattle, Washington, August 1994.  |   |                     |              |                        |
|       | CC | Lehikoinen, Juha et al., "MEX: A Distributed Software Architecture for Wearable Computers," 3 <sup>rd</sup> International Symposium on Wearable Computers, San Francisco, California, October 18-19, 1999  |   |                     |              |                        |
|       | CD | Leonhardi, Alexander et al., "Virtual Information Towers - A Metaphor for Intuitive, Location-Aware Information Access in a Mobile Environment, 3 <sup>rd</sup> International Symposium on Wearable Computers, San Francisco, California, October 18-19, 1999  |   |                     |              |                        |
|       | CE | Lunt, Teresa F. et al., "Knowledge-Based Intrusion Detection," Proceedings of the Annual Artificial Intelligence Systems in Government Conference, IEEE Comp. Soc. Press, Vol. Conf. 4, 1989, pages 102-107.   |   |                     |              |                        |
|       | CF | Maes, Pattie, "Agents That Reduce Work and Information Overload," Communications of the ACM, Vol. 37, No. 7, July 1994.  |   |                     |              |                        |
|       | CG | Metz, Cade, "MIT: Wearable PCs, Electronic Ink, and Smart Rooms," PC Magazine, pp. 192-193, June 1998.   |   |                     |              |                        |
|       | CH | Oakes, Chris, "The Truman Show Realized?",<br><a href="http://www.wired.com/news/news/technology/story/15745.html">http://www.wired.com/news/news/technology/story/15745.html</a><br>[Accessed 10/21/98]   |   |                     |              |                        |
|       | CI | Picard, R.W. and Healey, J., "Affective Wearables," Personal Technologies vol. 1:231-240, MIT Media Laboratory (1997).   |   |                     |              |                        |
|       | CJ | "Research Areas in Affective Computing,"<br><a href="http://www.media.mit.edu/affect/">http://www.media.mit.edu/affect/</a><br>[Accessed 10/2/98]  |   |                     |              |                        |
|       | CK | "Research on Affective Pattern Recognition and Modeling,"<br><a href="http://www.media.mit.edu/affect/AC_research/recognizing.html">http://www.media.mit.edu/affect/AC_research/recognizing.html</a><br>[Accessed 10/2/98]                                     |   |                     |              |                        |

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|-------|----|---|---|
| Sheet | 4  | of  | 4 |
| TH    | CL | "Research on Sensing Human Affect,"<br><a href="http://www.media.mit.edu/affect/AC_research/sensing.html">http://www.media.mit.edu/affect/AC_research/sensing.html</a><br>[Accessed 10/2/98]                          |   |
|       | CM | Rhodes, Bradley J., "The Wearable Remembrance Agent: A System for Augmented Memory," Proceedings of the First International Symposium on Wearable Computers (ISWC '97), Cambridge, MA, October 13-14, 1997            |   |
|       | CN | Rhodes, Bradley, "WIMP Interface Considered Fatal,"<br><a href="http://rhodes.www.media.mit.edu/people/rhodes/Papers/no-wimp.html">http://rhodes.www.media.mit.edu/people/rhodes/Papers/no-wimp.html</a><br>7/23/98   |   |
|       | CO | Sato, J. et al., "Autonomous Behavior Control of Virtual Actors Based on the AIR Model," Proceedings Computer Animation, June 5, 1997.  |   |
|       | CP | Schneider, Jay and Jim Suruda, "Modeling Wearable Negotiation in an Opportunistic Task Oriented Domain," 3 <sup>rd</sup> International Symposium on Wearable Computers, San Francisco, California, October 18-19 1999 |   |
|       | CQ | Smailagic, Asim et al., "MoCCA: A Mobile Communication and Computing Architecture," 3 <sup>rd</sup> International Symposium on Wearable Computers, San Francisco, California, October 18-19, 1999                     |   |
|       | CR | "SmartDesk Home Page," <a href="http://vismod.www.media.mit.edu/vismod/demos/smartdesk/">http://vismod.www.media.mit.edu/vismod/demos/smartdesk/</a><br>[Accessed 10/2/98]  |   |
|       | CS | "Smart Rooms,"<br><a href="http://vismod.www.media.mit.edu/vismod/demos/smartroom/">http://vismod.www.media.mit.edu/vismod/demos/smartroom/</a><br>[Accessed 10/2/98]   |   |
|       | CT | Tan, Hong Z. and Alex Pentland, "Tactual Displays for Wearable Computing," IEEE, Massachusetts Institute of Technology Media Laboratory, pp. 84-88, 1997.   |   |
|       | CU | "The MIT Wearable Computing Web Page,"<br><a href="http://wearables.www.media.mit.edu/projects/wearables/">http://wearables.www.media.mit.edu/projects/wearables/</a><br>[Accessed 10/2/98]                           |   |
|       | CV | "Wearable Computer Systems for Affective Computing,"<br><a href="http://www.media.mit.edu/affect/AC_research/wearables.html">http://www.media.mit.edu/affect/AC_research/wearables.html</a><br>[Accessed 10/2/98]     |   |
|       | CW | Yang, Jie et al., "Smart Sight: A Tourist Assistant System," 3 <sup>rd</sup> International Symposium on Wearable Computers, San Francisco, California, October 18-19, 1999  |   |

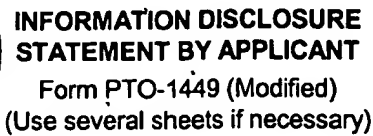
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*Thomas Harkin*

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*September 23, '04*

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